

Output cell

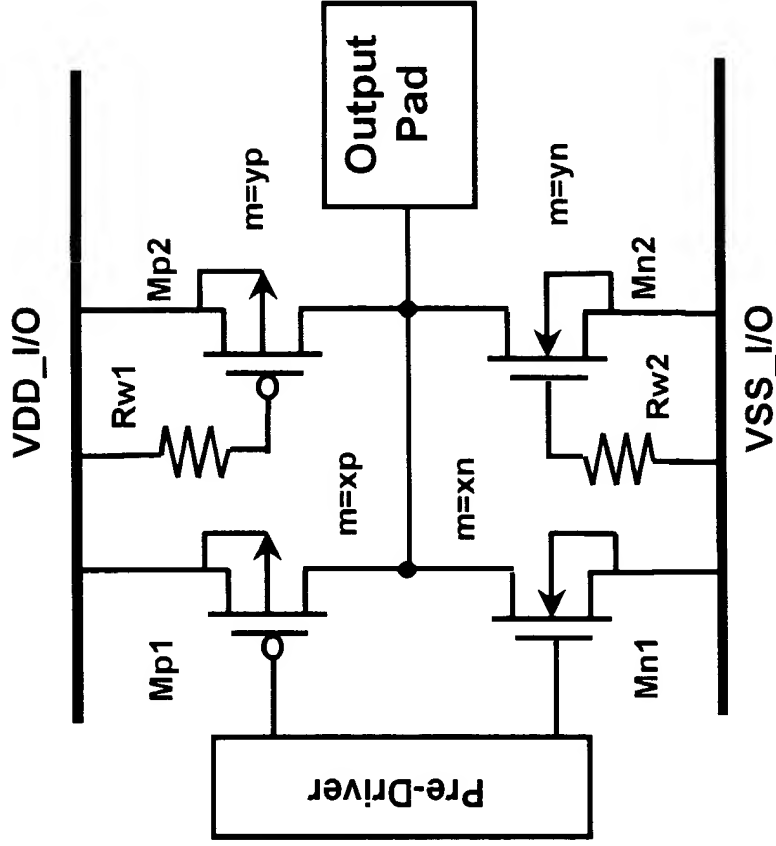


Fig.1(a)
Prior Art

Input cell

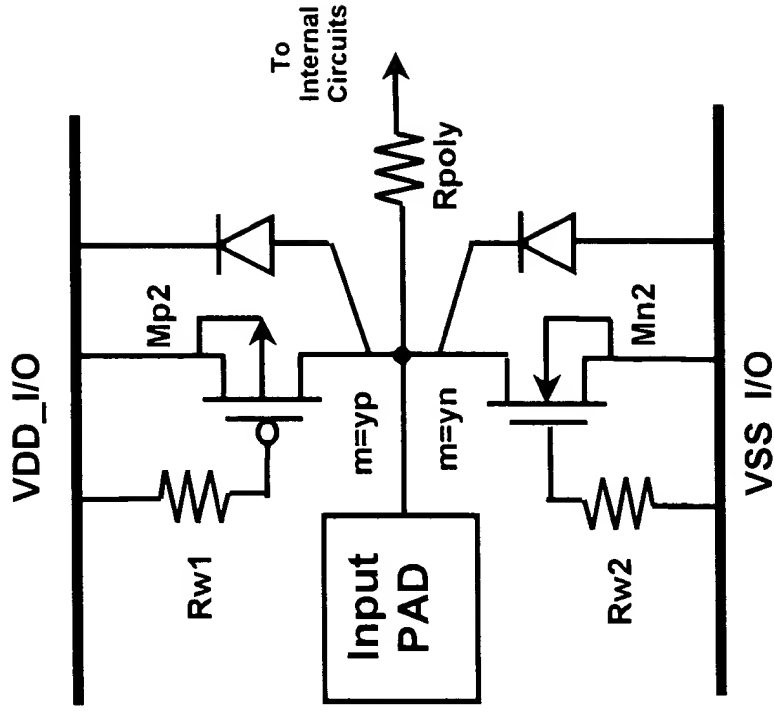


Fig.1(b)
Prior Art

Bi-directional cell

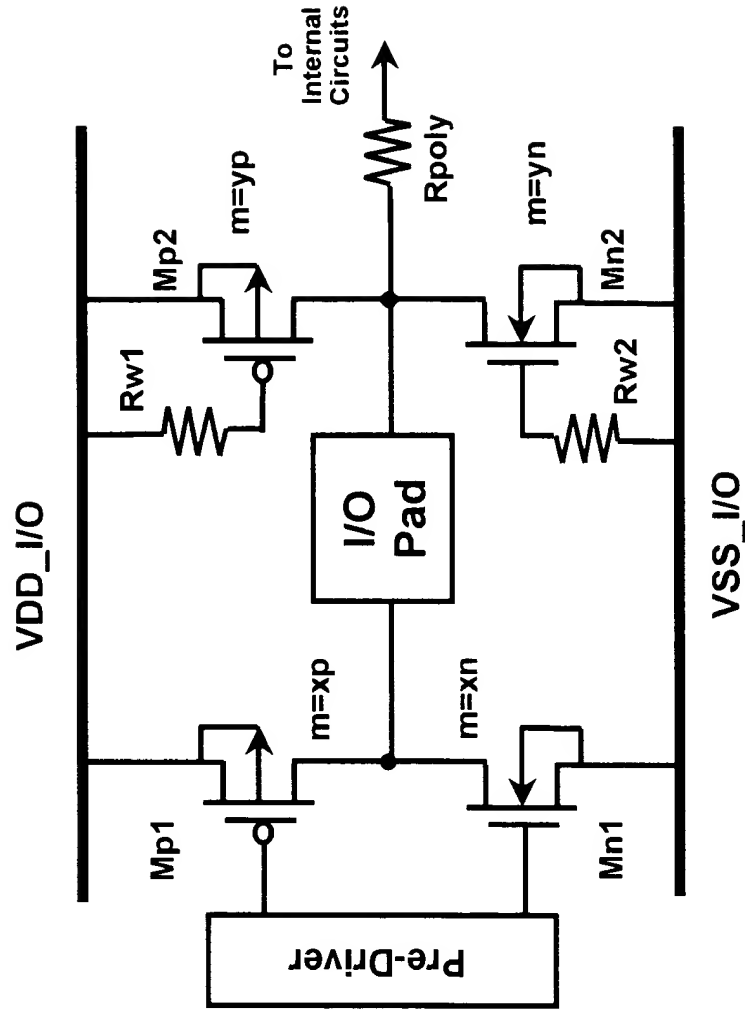


Fig.1(c)

Prior Art

Output PAD



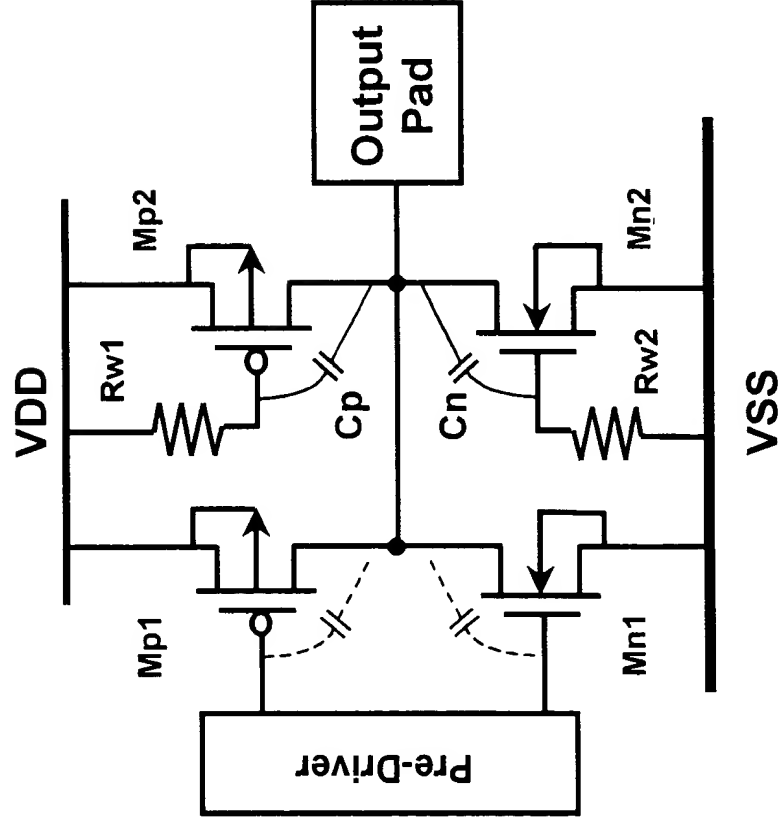


Fig.3
Prior Art

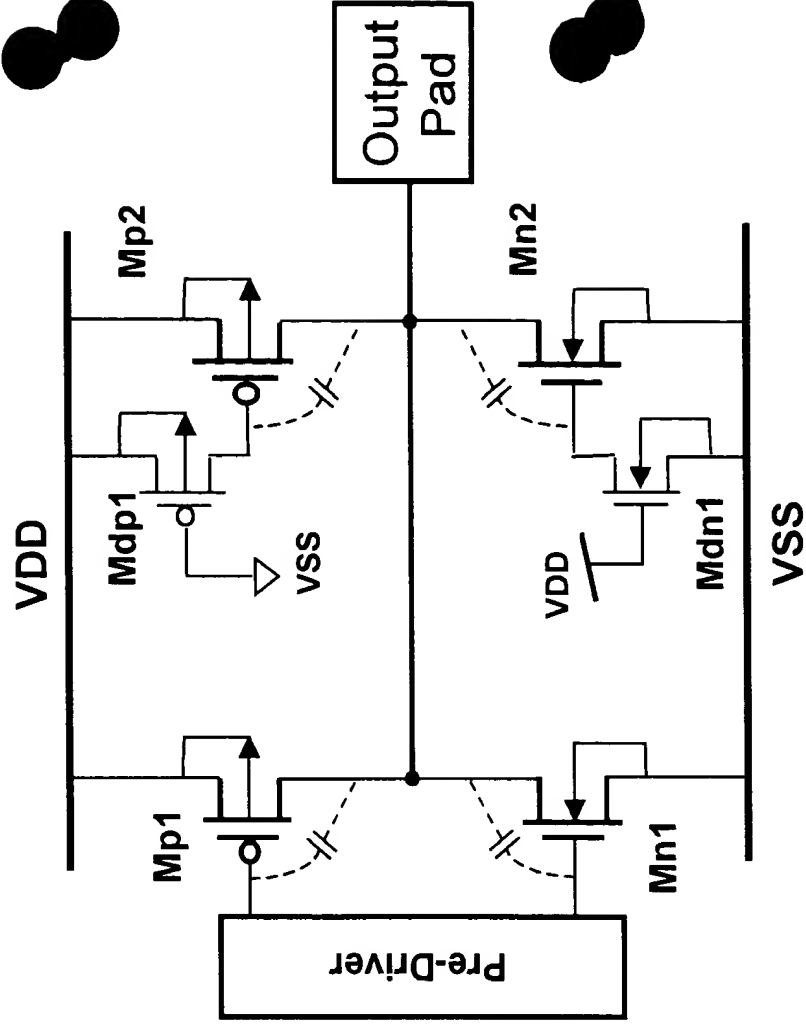


Fig.4
Prior Art

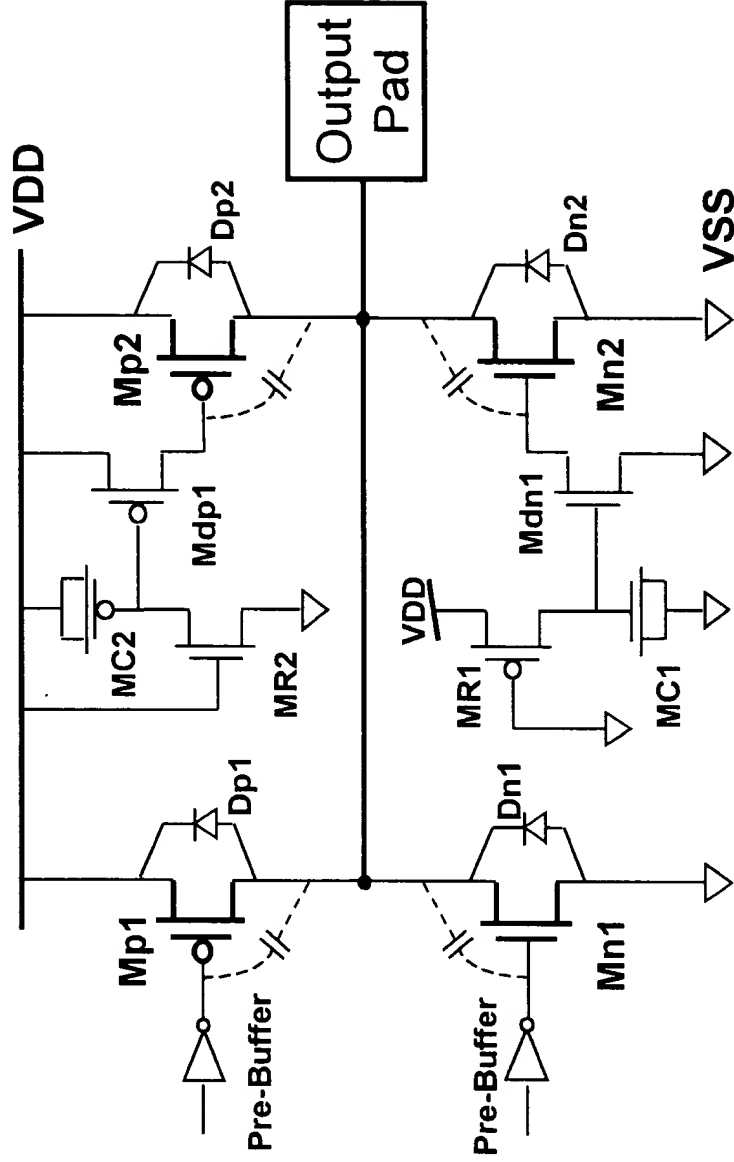


Fig.5
Prior Art

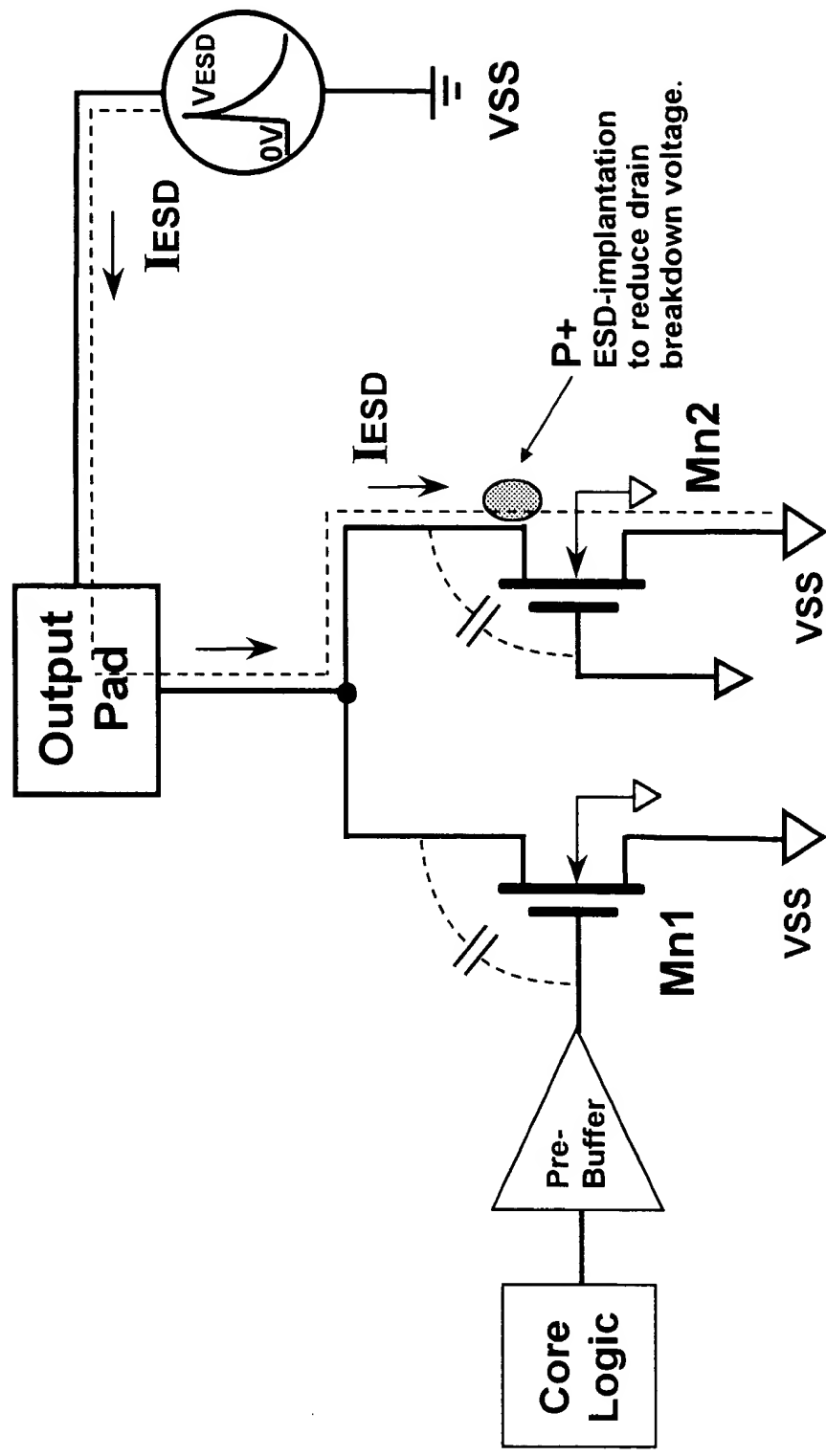


Fig.6(a)

Prior Art

Pre-buffer

Output PAD

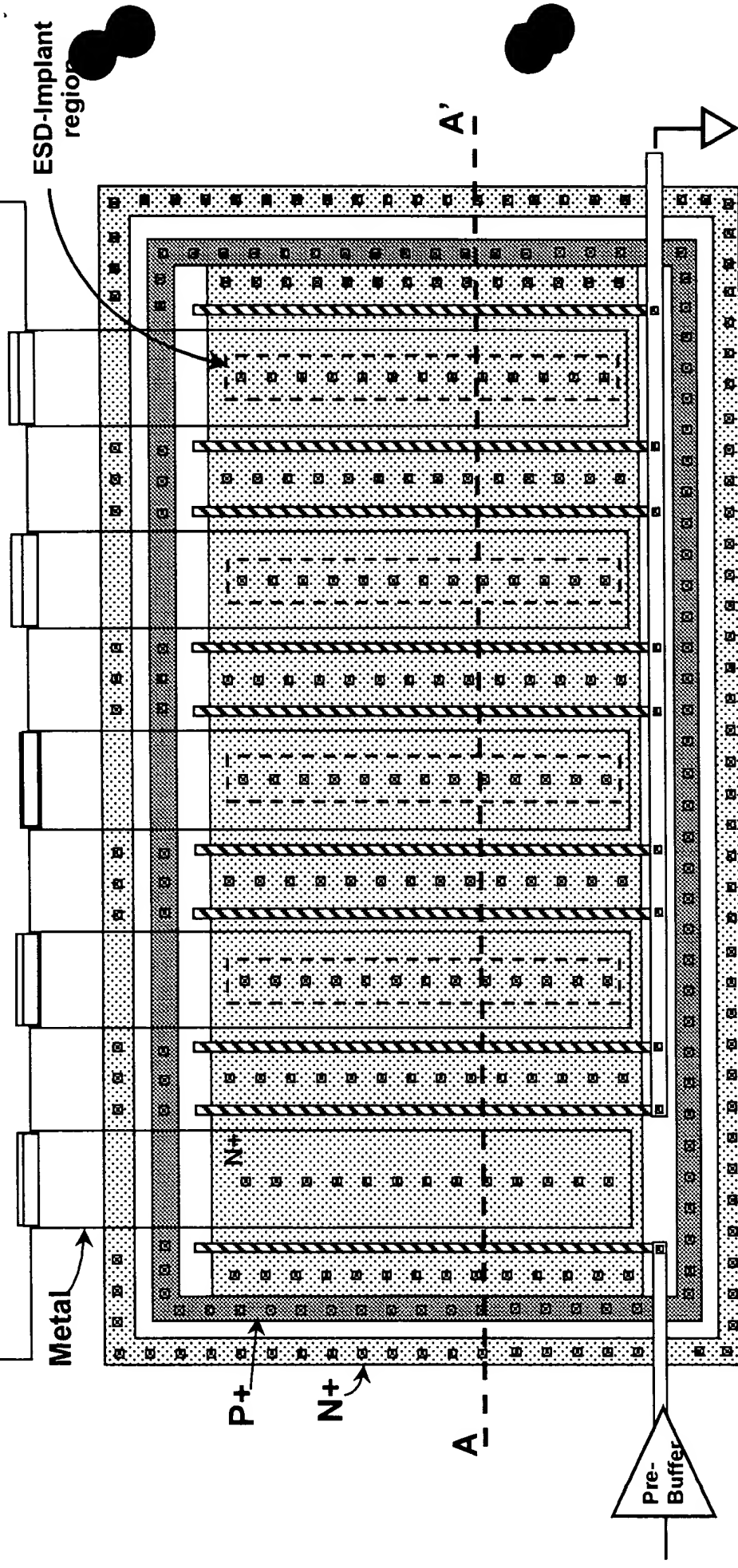
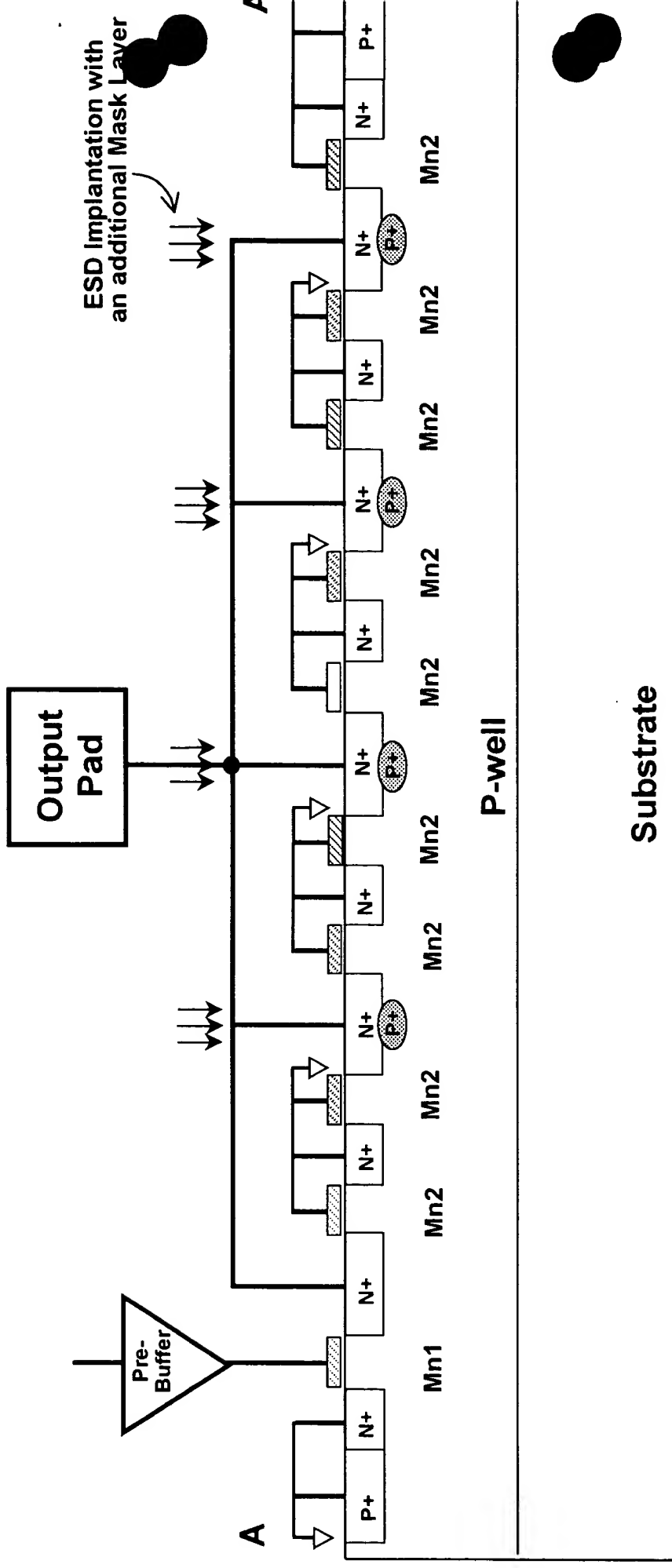


Fig.6(b)
Prior Art

[illegible]

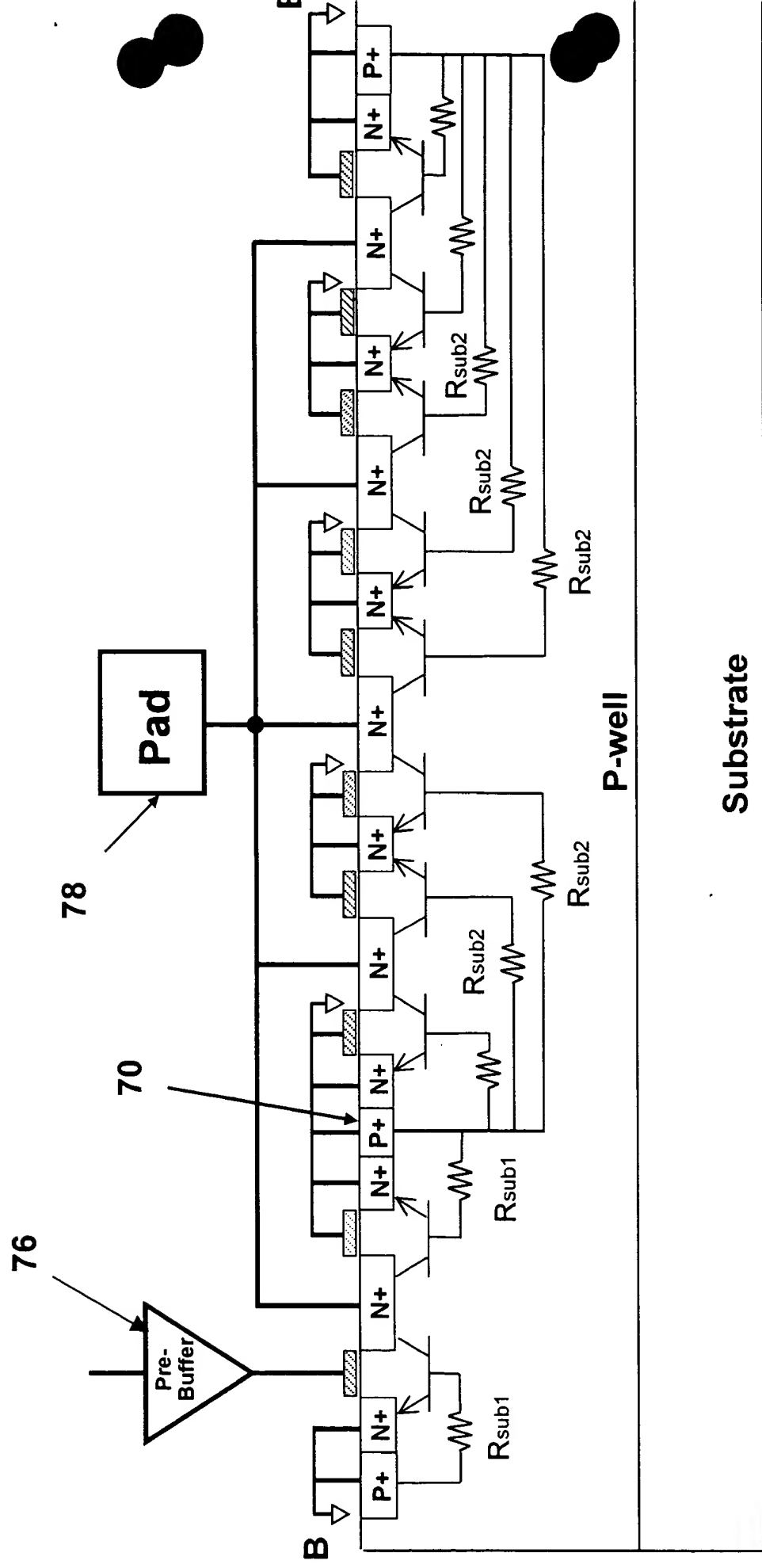


Fig. 7(a)

Output PAD

Metal

The additional
P⁺ pick-up diffusion

P⁺

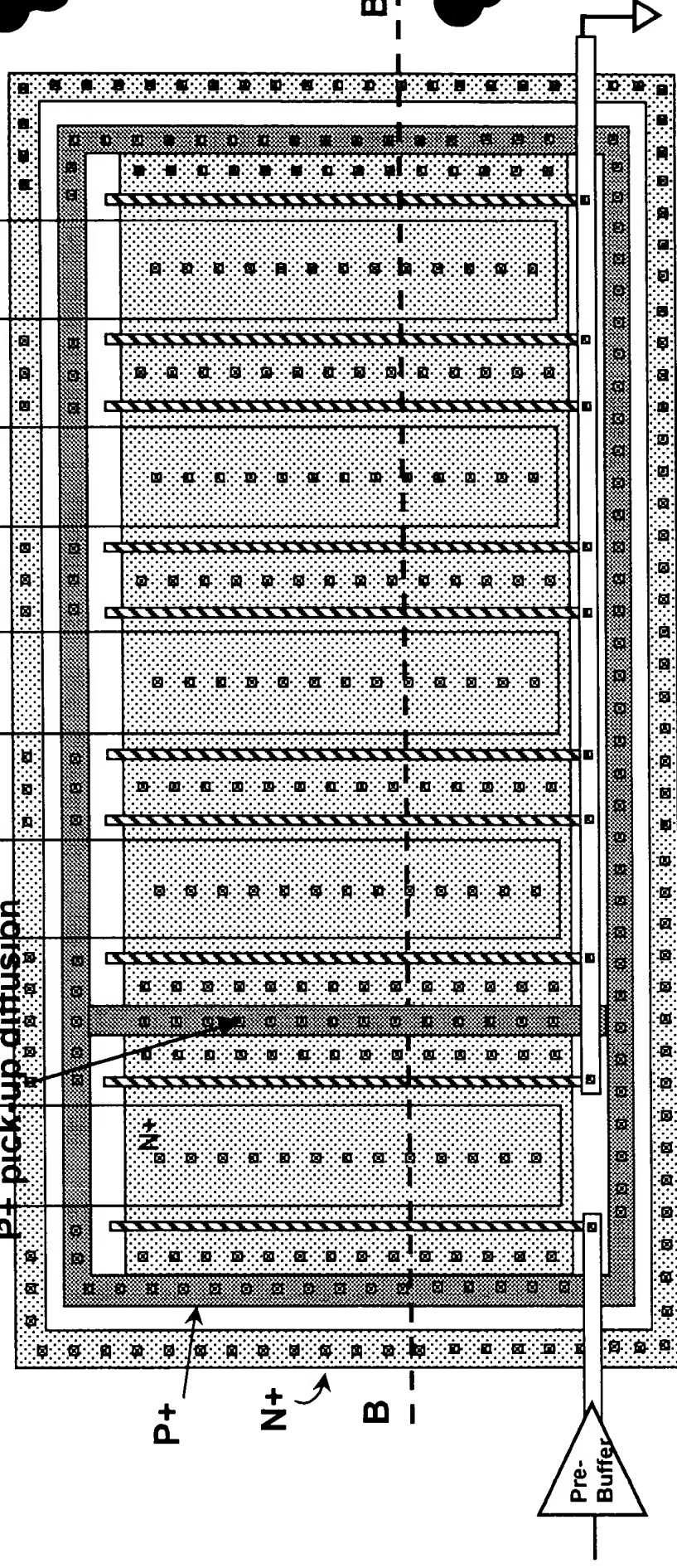
N⁺

B⁻

B⁻

Pre-
Buffer

Fig.7(c)



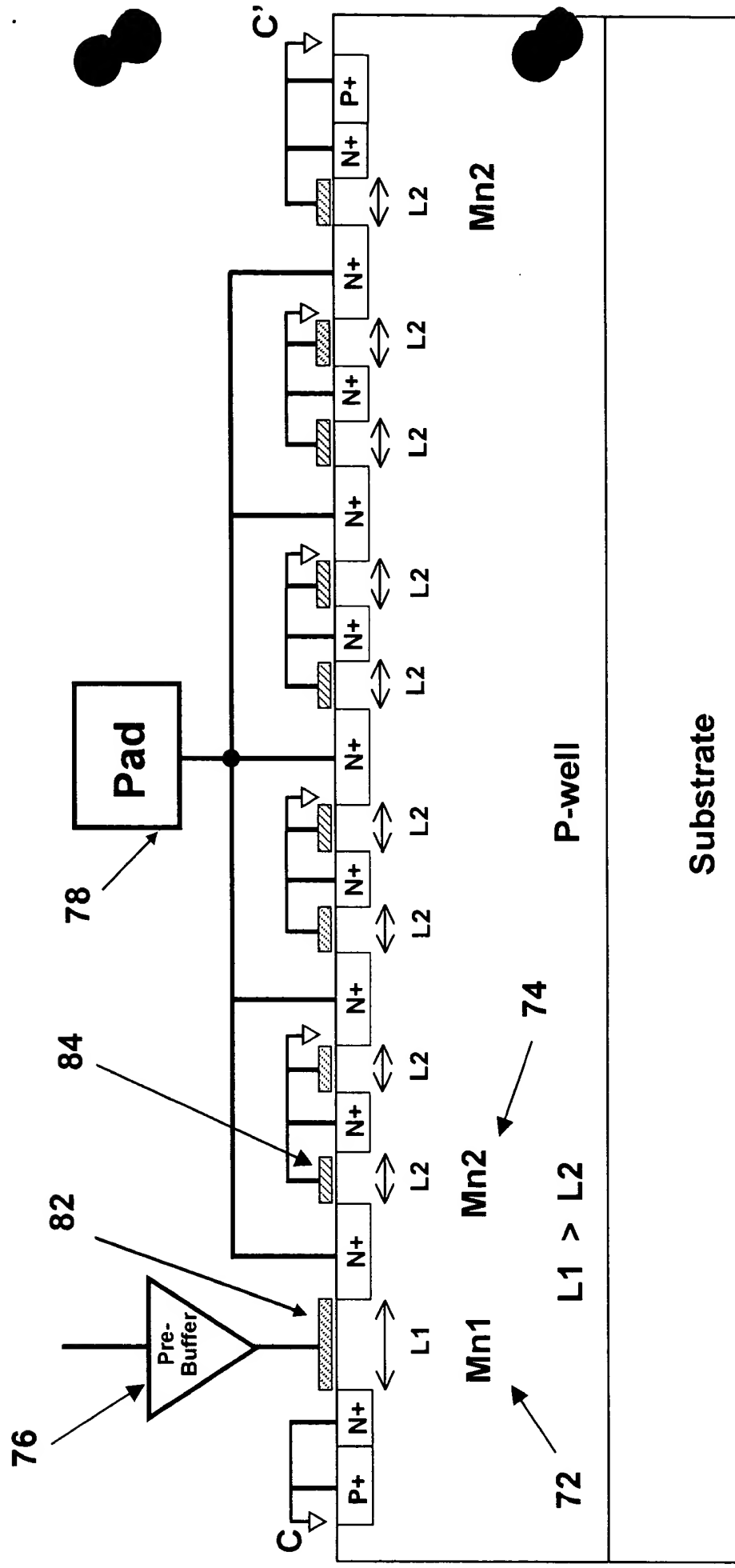


Fig. 8(a)

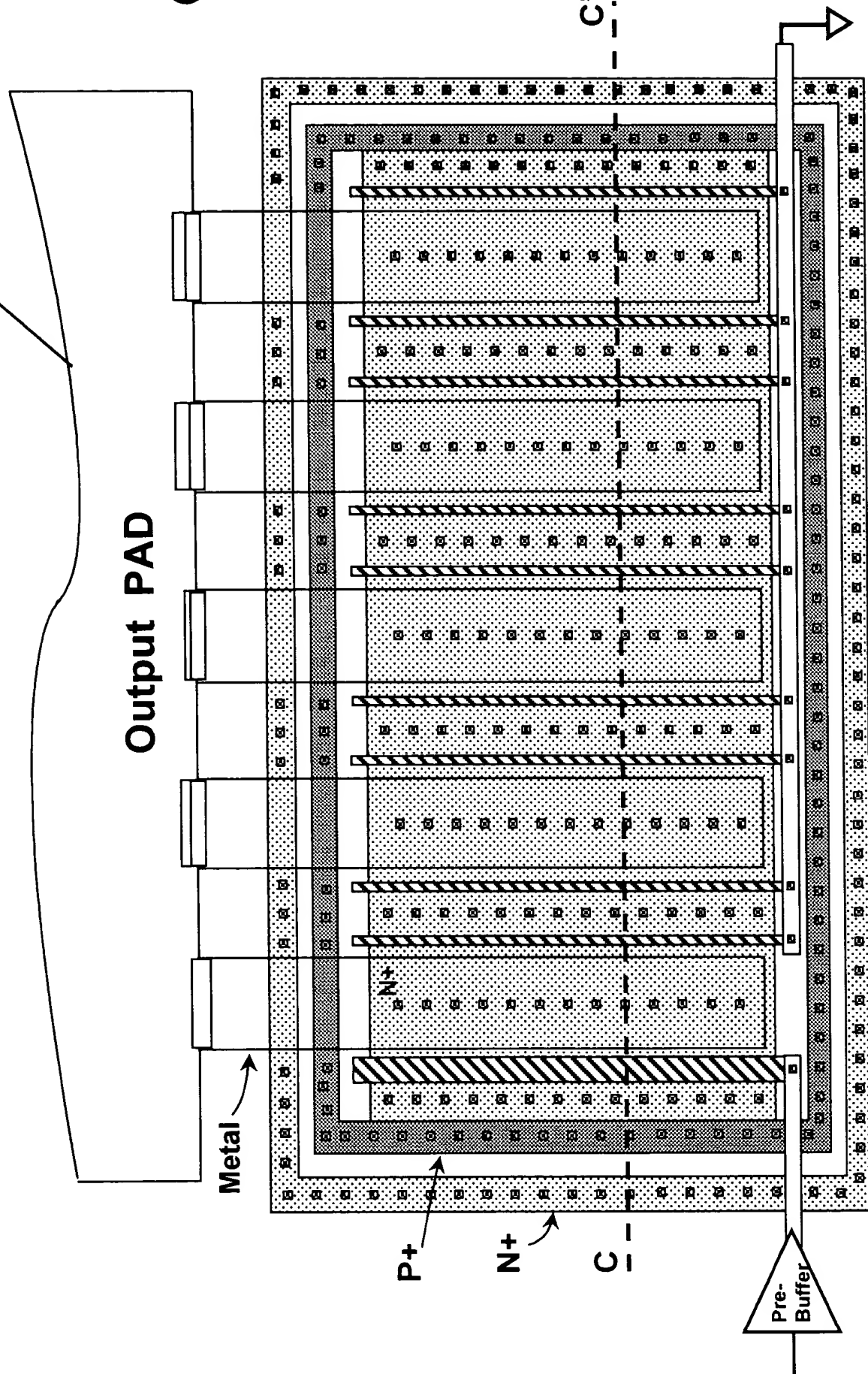


Fig.8(c)

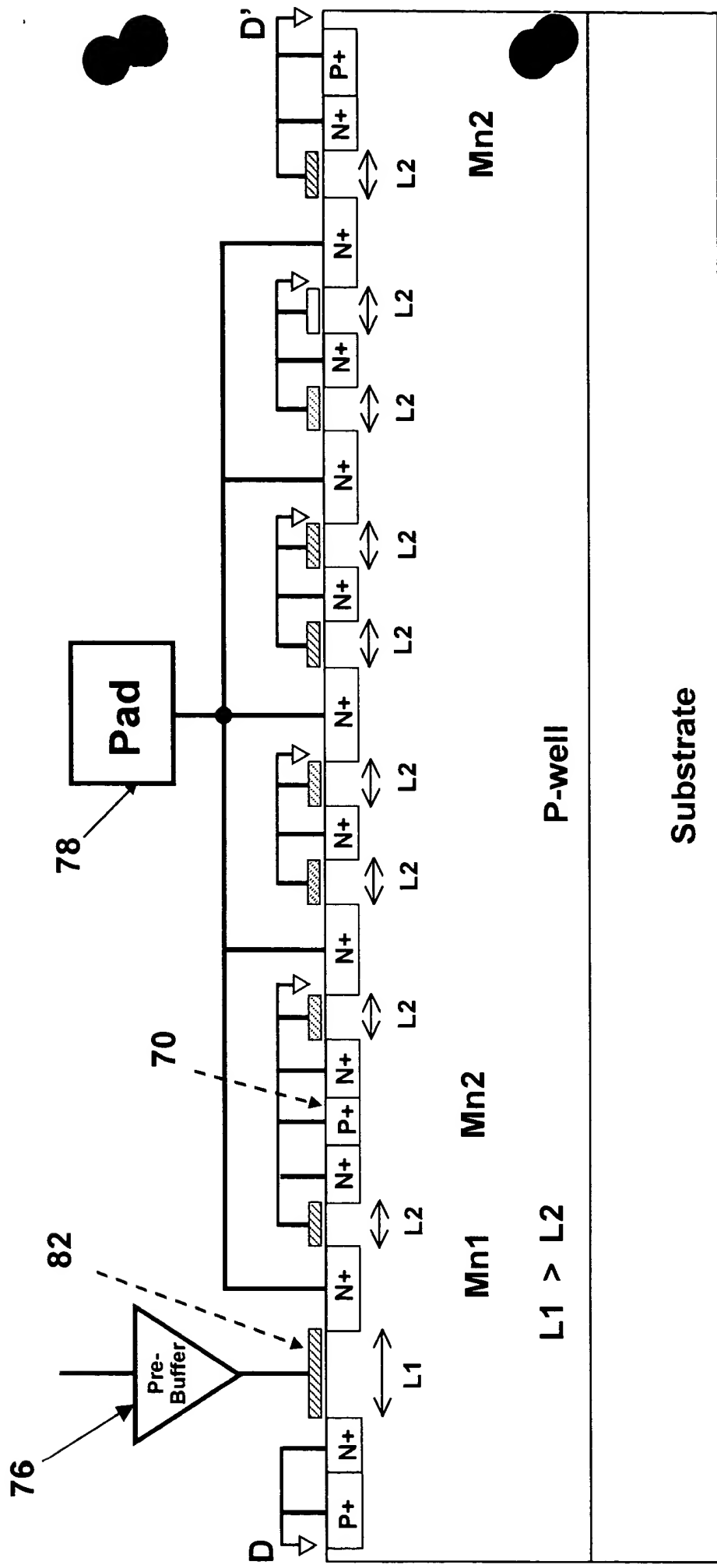


Fig.9(a)

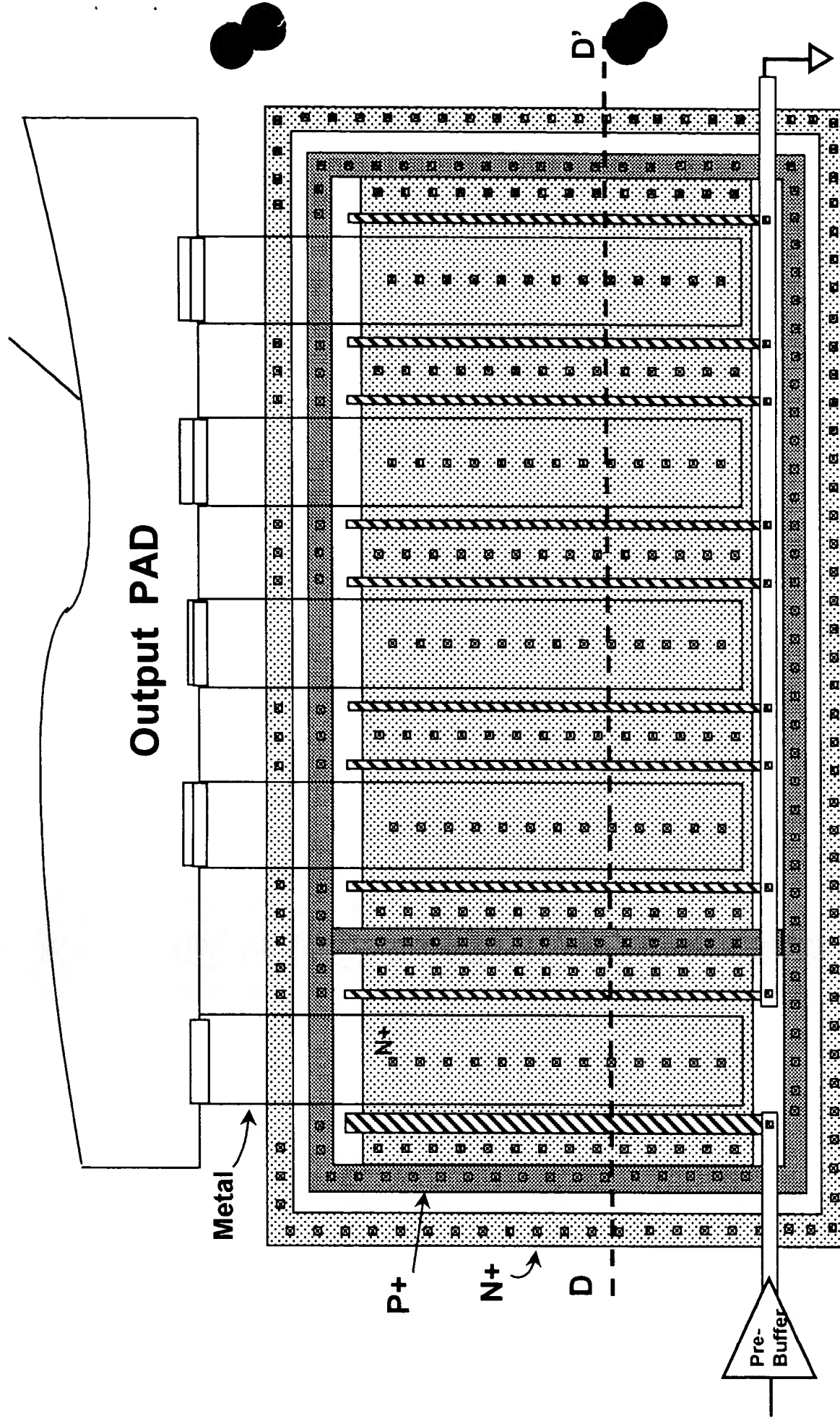


Fig. 9(b)

Input cell

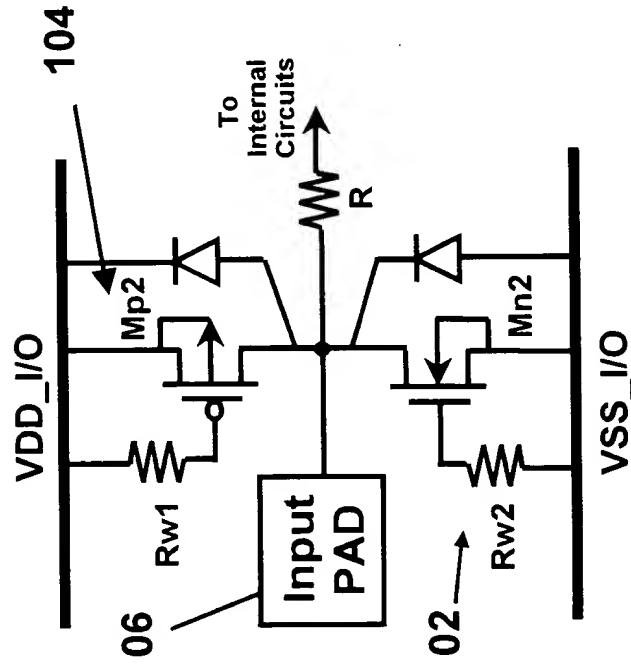


Fig.10(a)

106

Layout of Mn2 in the Input cell

Input PAD

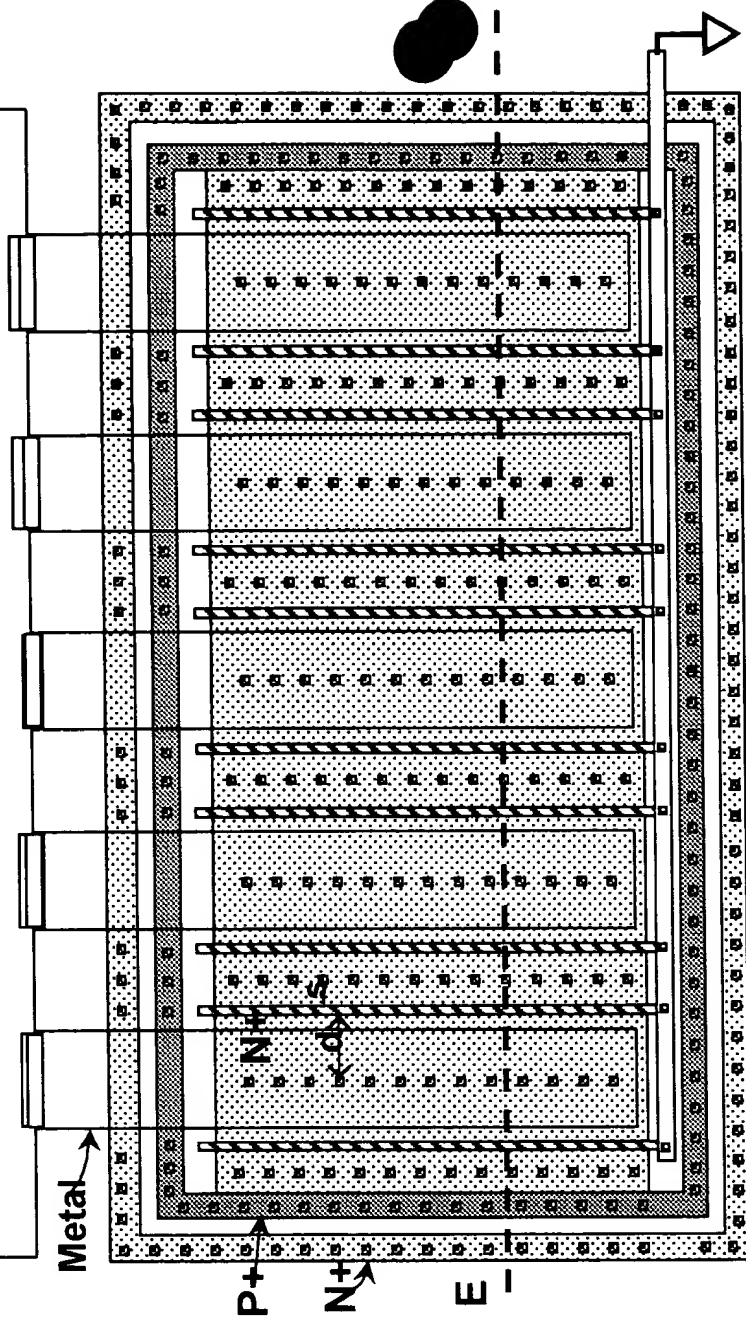


Fig.10(b)

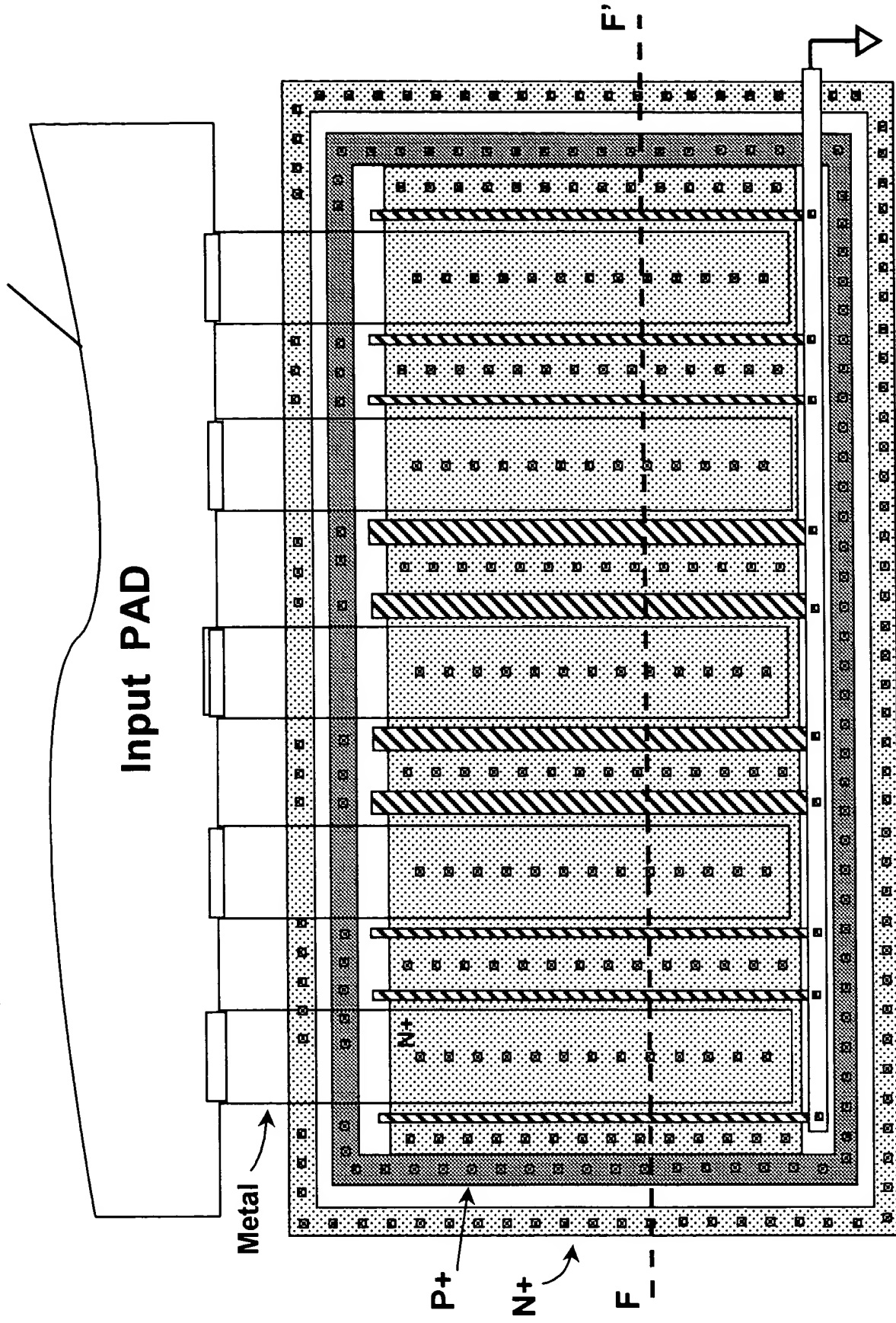


Fig.11(a)

106

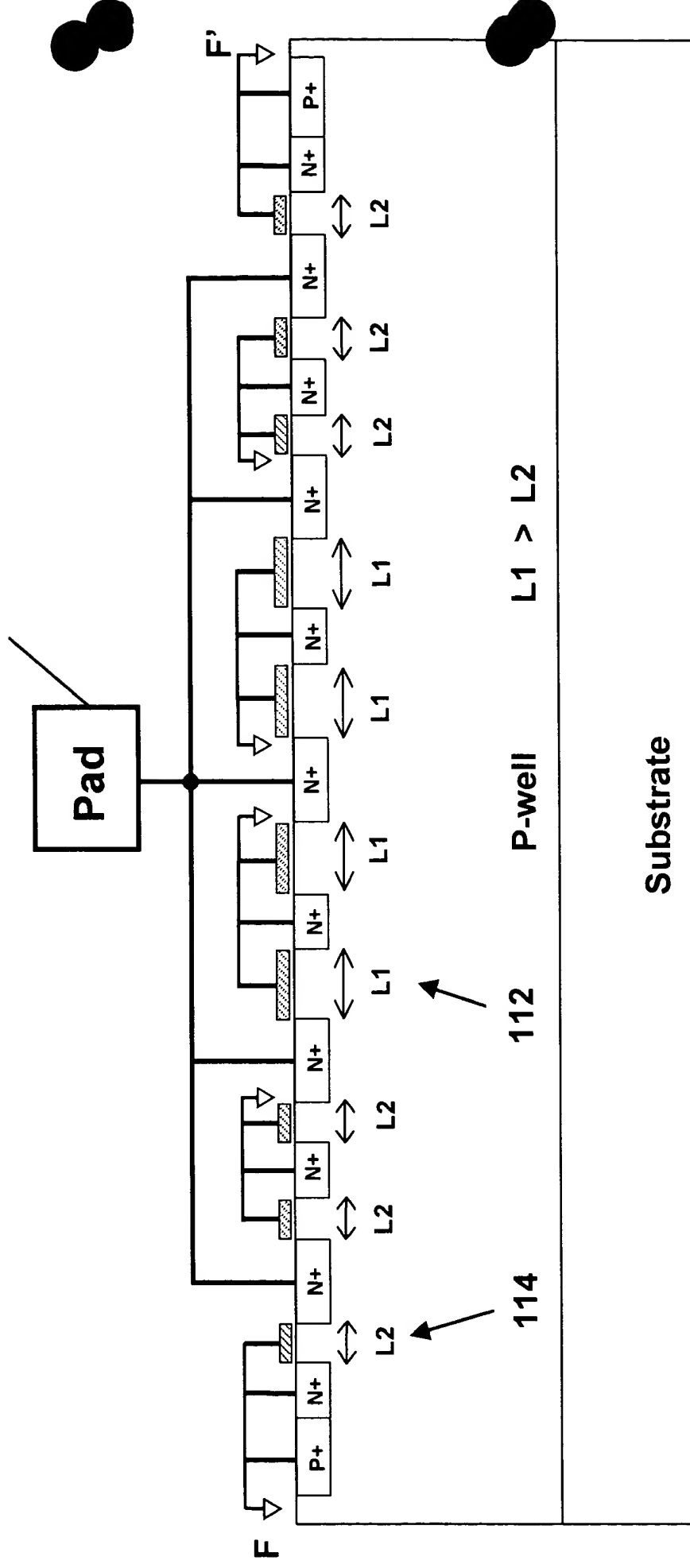


Fig.11(b)

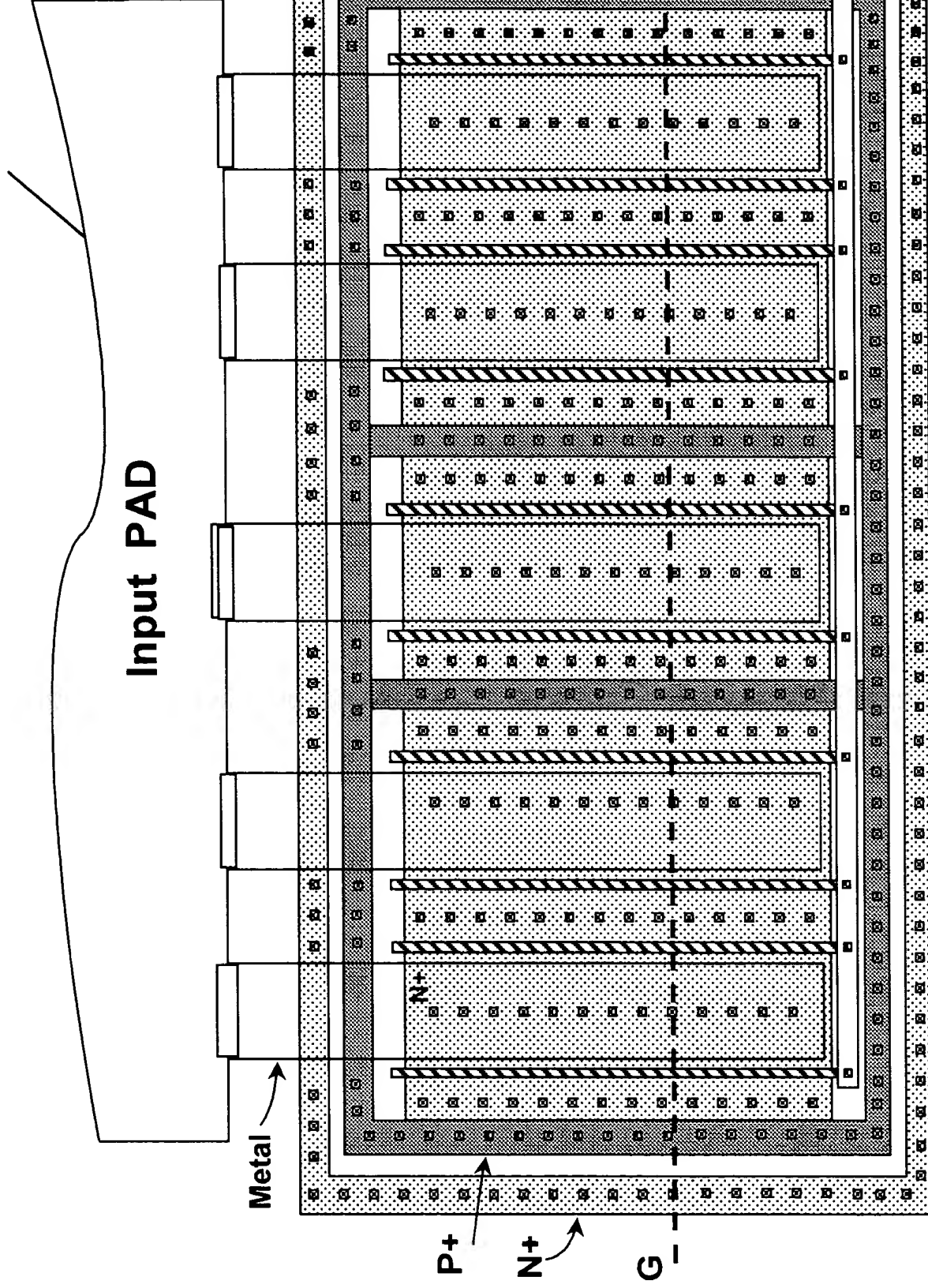


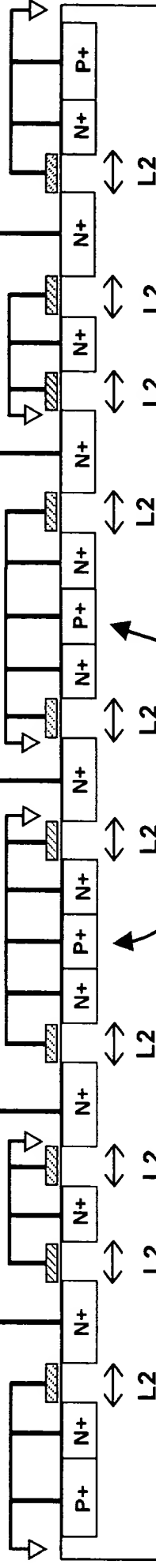
Fig.12(a)

106

Pad

G

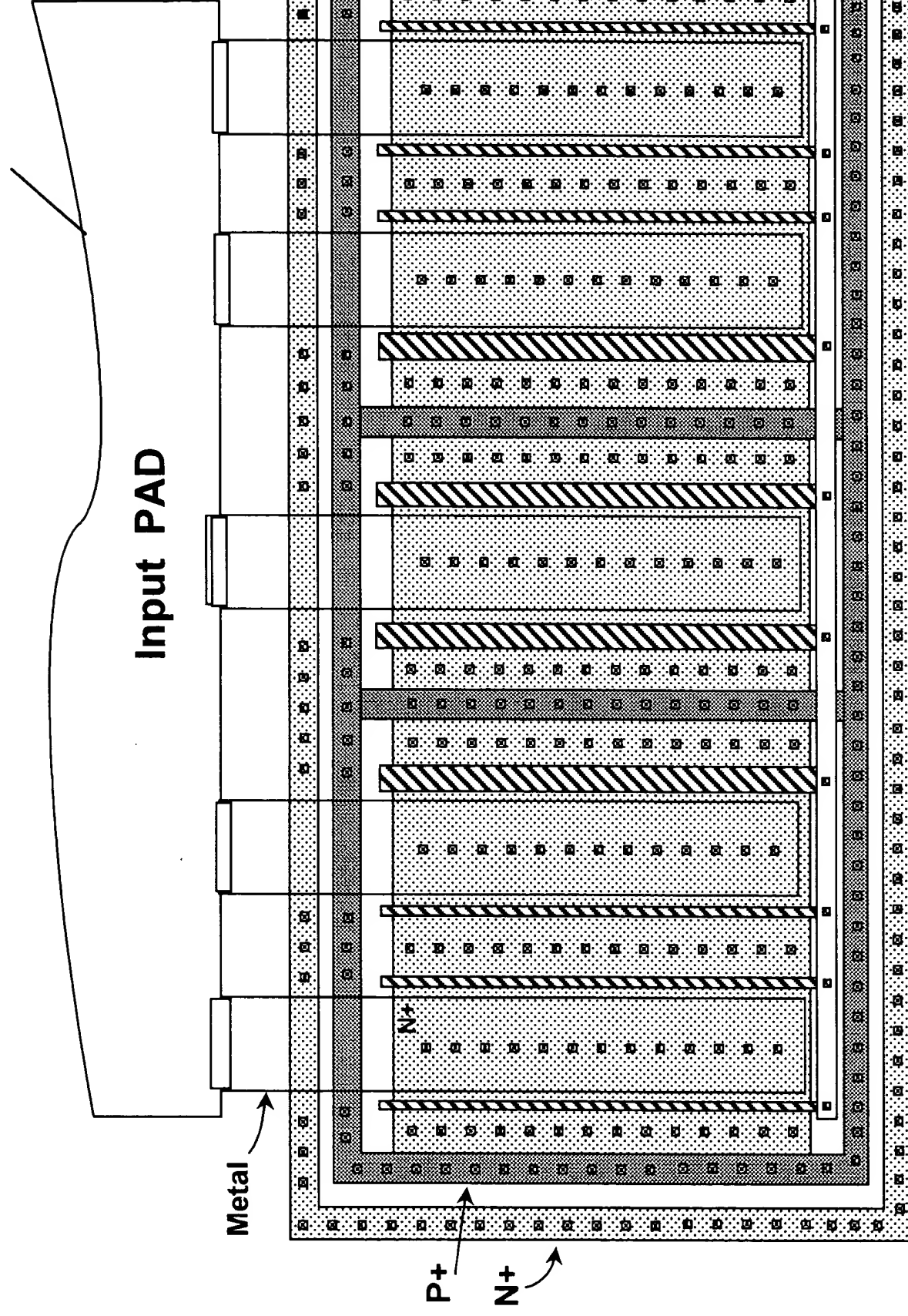
G'



P-well 122

Substrate

Fig.12(b)



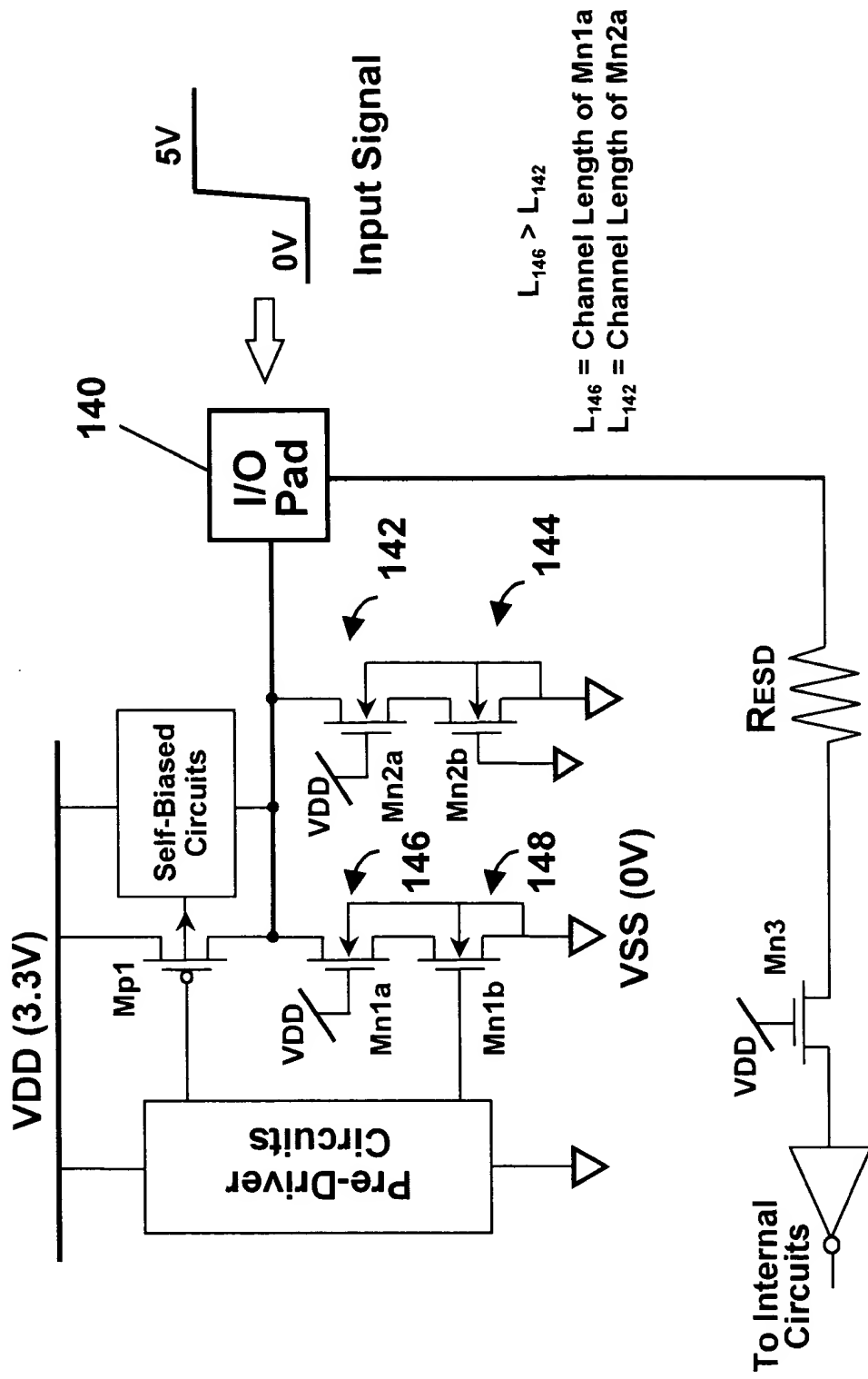


Fig.14(a)

